

## APPLIANCE FOR ASYNCHRONOUS DATA STORAGE MIRRORING

### **ABSTRACT**

A method for managing a data storage system includes maintaining a record predictive of locations to which  
5 data are to be written on a first storage medium by a host computer. Upon receiving a write command from the host computer directed to storing specified data at a specified location on the first storage medium, if the specified location is not included in the record, the  
10 record is updated responsively to the specified location. A signal is sent to the host computer that the specified data have been stored in the data storage system responsively to storing the specified data and, if the specified location was not included in the record,  
15 responsively to updating the record. The specified data are copied to the second storage medium responsively to the record, and are stored in the specified location on both the first and second storage media.